

Appl. No. : 10/748,713
Filed : December 30, 2003

AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A method for the determination of the resistance of cells versus the action of an active substance comprising:

- (i) providing a sample containing cells exposed or having been exposed to said active substance,
- (ii) analyzing a gene expression pattern of said cells on a micro-array, said microarray comprising on specific locations thereon capture probes for specific detection and quantification of 49 human at least 5 ATP binding cassette (ABC) transporters selected from the ABC transporter subfamilies A, B, C, D, E, F and G, wherein said microarray contains capture probes to at least 5 ABC transporter subfamilies, and wherein said microarray is a low density microarray containing consisting of capture probes for the detection of up to 1000 3000 genes,

wherein a change of the gene expression of said at least 5 out of said 49 ABC transporters by a factor of at least about 1.5 as compared to a reference is indicative of the development and/or existence of resistance of said cells to the substance.

2. **(Currently amended)** The method of claim 1, wherein said analyzing of gene expression pattern is for ~~at least 5, 10, 39 and~~ 49 ABC transporters selected from those listed in Table 1.

3. **(Cancelled)** The method of claim 1, wherein said at least 5 genes of the ABC transporter family are selected from the genes provided in Table 1.

4. **(Original)** The method of claim 1, wherein said resistance of cells is resistance of cells from a patient to the chemotherapy by a given drug.

5. **(Original)** The method of any one of claim 1, wherein said drug is selected from Table 3.

6. **(Original)** The method of claim 1, wherein said cells are incubated in the presence of said drug.

7. **(Previously presented)** The method of claim 6, wherein the cells are derived from a patient and wherein said method is designed for the determination of a potential active drug for the patient treatment.

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8. **(Currently amended)** The method of ~~any one of claims~~ claim 1, 2, or 3, further comprising determining an activity of said drug against said cells.

9. **(Currently amended)** The method of ~~any one of claims~~ claim 1, 2, or 3, further comprising selecting of an active drug for patient treatment.

10. **(Currently amended)** A method for monitoring a patient treated with a drug for chemotherapy, comprising the method of ~~claim~~ any one of claims 1, 2, or 3, wherein said drug is for chemotherapy.

11. **(Original)** The method of claim 1, wherein the micro-array contains at least one gene selected from Kir6.1, Kir6.2 and IMPT.

12. **(Previously presented)** The method of claim 1, wherein said sample containing cells is from acute myeloid leukemia.

13. **(Original)** The method of claim 1, wherein said sample containing cells is from acute lymphocytic leukemia.

14. **(Original)** The method of claim 1, wherein said sample containing cells is from solid tumors.

15. **(Original)** The method of claim 1, wherein said capture probes are single-stranded nucleotides

16. **(Original)** The method of claim 1, wherein each one specific location gives the quantification of one ABC transporters gene.

17. **(Withdrawn)** A kit, comprising an array with capture probes located at specific locations for the detection and quantification of the gene expression of at least 5 ABC transporters.